AMENDMENT

The listing of claims will replace all prior versions and listings of claims in the Application. Please amend the claims as follows:

Listing of Claims:

1. (*Withdrawn*) A hydrogel for use in the treatment of arthritis, symptoms associated therewith, or arthritis and symptoms associated therewith, said hydrogel comprising about 0.5 to 25% by weight polyacrylamide, based on the total weight of the hydrogel.

2. (*Withdrawn*) The hydrogel according to claim 1, which is made by combining acrylamide and methylene bis-acrylamide in a molar ratio of 150:1 to 1000:1.

3. (*Withdrawn*) The hydrogel according to claim 1, comprising less than 15% by weight polyacrylamide, based on the total weight of the hydrogel.

4. (*Withdrawn*) The hydrogel according to claim 3 comprising at least 1% by weight polyacrylamide, based on the total weight of the hydrogel.

5. (*Withdrawn*) The hydrogel according to claim 1 further comprising at least 75% by weight pyrogen-free water or saline solution.

6. (*Withdrawn*) The hydrogel according to claim 1 further comprising at least 90% by weight pyrogen-free water or saline solution.

7. (*Withdrawn*) The hydrogel according to claim 1 having a complex viscosity of 2 to 25 Pa s.

8. (*Withdrawn*) The hydrogel according to claim 1 having a complex viscosity less than 25 Pa s and an elasticity modulus less than 200 Pa.

Claims 9.-16. (Cancelled)

17. (*Currently Amended*) A method ~~of treating arthritis, symptoms associated therewith, or arthritis and symptoms associated therewith~~ for replacing, mimicking or augmenting a function of cartilage, synovial fluid or both comprising administering an endoprosthesis to a joint in a mammal, wherein said endoprosthesis comprises a hydrogel ~~to a mammal~~, said hydrogel comprising 0.5% to 25% by weight polyacrylamide, based on the total weight of the hydrogel.

18. (*Currently Amended*) The method according to claim 17, wherein the hydrogel is obtained by a process comprising combining acrylamide and methylene bis-acrylamide in a molar ratio of 150:1 to 1000:1.

19. (*Previously Presented*) The method according to claim 17, wherein the hydrogel comprises less than 15% by weight polyacrylamide, based on the total weight of the hydrogel.

20. (*Previously Presented*) The method according to claim 19, wherein the hydrogel comprises at least 1% by weight polyacrylamide, based on the total weight of the hydrogel.

21. (*Previously Presented*) The method according to claim 17, wherein the hydrogel has a complex viscosity of about 2 to 25 Pa s.

22. (*Previously Presented*) The method according to claim 17, wherein the hydrogel further comprises at least 75% by weight pyrogen-free water or saline solution.

23. (*Previously Presented*) The method according to claim 17, wherein the hydrogel comprises at least 80% by weight pyrogen-free water or saline solution.

24. (*Currently Amended*) The method according to claim 17, wherein the administering comprises injecting the hydrogel into ~~the~~ an intra-articular cavity of ~~a~~ the joint.

25. (*Previously Presented*) The method according to claim 17, wherein the hydrogel is radio–labeled and the administering may be monitored by visualization.

26. (*Previously Presented*) The method according to claim 24, further comprising administering hydrogel injections to excessively stressed areas of the intra-articular cavity.

27. (*Withdrawn*) A prosthetic device for the treatment of arthritis, symptoms associated therewith, or arthritis and symptoms associated therewith, wherein the device comprises a polyacrylamide hydrogel comprising 0.5 to 25% by weight polyacrylamide, based on the total weight of the hydrogel, said device administered to the intra-articular cavity of joint.

28. (*Withdrawn*) The prosthetic device according to claim 27, wherein the hydrogel further comprises at least 75% by weight pyrogen-free water or saline solution.

29. (*Withdrawn*) A prosthetic device for augmenting or replacing cartilage in the intra-articular cavity of a joint, said device comprises a polyacrylamide hydrogel comprising about 0.5 to 25% by weight polyacrylamide, based on the total weight of the hydrogel.

30. (*Withdrawn*) The prosthetic device according to claim 27, wherein the hydrogel further comprises at least 75% by weight pyrogen-free water or saline solution.

31. (*Withdrawn*) The prosthetic device according to claim 27, implanted or injected into an intra-articular cavity of a joint.

32. (*Withdrawn*) The prosthetic device according to claim 27, wherein the device is implanted and surface treated.

33. (*Withdrawn*) The prosthetic device according to claim 27, wherein the joint is selected from the group consisting of a knee joint, a hip joint; and the metacarpal-phalangeal and interphalangeal joints in hands and feet.

34. (*Withdrawn*) The prosthetic device according to claim 27, wherein the hydrogel is radio-labelled.

Claim 35. *(Cancelled)*

36. (*Previously Presented*) The method according to claim 17, wherein the hydrogel comprises at least 75% by weight pyrogen-free water.

37. (*Previously Presented*) The method according to claim 17, wherein the hydrogel comprises at least 90% by weight pyrogen-free water or saline solution.

38. (*Previously Presented*) The method according to claim 17, wherein the hydrogel comprises at least 75% by weight saline solution.

39. (*Currently Amended*) The method according to claim 17, wherein the hydrogel has a complex viscosity of about 2 to 13[[25]] Pa s.

40. (*Withdrawn*) The prosthetic device according to claims 27 or 29 which is used for treating arthritis or augmenting or replacing cartilage in the intra-articular cavity of a joint.

41. (*Withdrawn*) The hydrogel according to claim 1, obtainable under conditions of radical initiation and washing with pyrogen-free water or saline solution.

42. (*Withdrawn*) The hydrogel according to claim 1, comprising less than 3.5% by weight polyacrylamide, based on the total weight of the hydrogel.

43. (*Withdrawn*) The method according to claim 16, wherein the hydrogel comprises less than 3.5% by weight polyacrylamide, based on the total weight of the hydrogel.

44. (*Withdrawn*) The hydrogel according to claim 1, obtainable by combining acrylamide and methylene-bis-acrylamide in amounts so as to give about 0.5 to 25% by weight acrylamide, based on the total weight of the hydrogel.